23.05.020
Replaced with new language.

23.05.020 - Grading:

Sections 23.05.022 through 23.05.039 establish standards for grading and excavation activities to minimize hazards to life and property; protect against erosion and the sedimentation of water courses; and protect the safety, use and stability of public rights-of-way and drainage channels. Additional standards for grading within a Sensitive Resource Area are in Sections 23.07.160 et seq. The grading standards of this chapter are organized into the following sections:

23.05.022	Grading Regulations Adopted
23.05.024	Grading Plan Required
23.05.025	Grading Permit Required
23.05.026	Grading Permit Exemptions
23.05.027	Grading Permit Fees
23.05.028	Grading Permit - Application Content
23.05.030	Grading Permit Review and approval
23.05.032	Commencement and Completion of Grading
23.05.034	Grading Standards
23.05.036	Sedimentation and Erosion Control
23.05.038	Appeal
23.05.039	Nuisance and Hazard Abatement

23.05.022
Replaced by 23.05.026.

23.05.022 - Grading Regulations Adopted:

All grading activities shall occur pursuant to the provisions of Chapter 70 of the Uniform Building Code, 1985 edition, which is hereby adopted and incorporated into this title by reference as though it were fully set forth here.

In the event of any conflict between the provisions of this chapter and Chapter 70 of the Uniform Building Code, this chapter shall prevail.

23.05.024

23.05.024 - Grading Plan:

Subsection a
Replaced by 23.05.030.a

a. When required: In any case where a proposed project requiring land use permit approval involves 50 or more cubic yards of earth moving, the land use permit application shall include a grading plan containing the information specified by subsection b of this section.

Subsection b
Replaced by 23.05.038.b

b. Grading plan content: A grading plan shall be neatly and accurately drawn to scale, including the following information:

(i) Existing ground contours or elevations of the site at five foot intervals.

(ii) Contours or site elevations after grading is completed, including any modifications to drainage channels.

(iii) Any required retaining walls or other means of retaining cuts or fills.

(iv) Elevations of the edge of the pavement or road at driveway entrance.

(v) Elevation of the finish floor of the garage or other parking area.

(vi) Elevations at the base of building corners.

(vii) An estimate of the volume of earth to be moved, expressed in cubic yards.

Where a grading permit is required by Section 23.05.025 (Grading Permit Required), the grading plan shall also include all information required by Section 23.05.028 (Grading Permit - Application Content).

23.05.025
Replaced with 23.05.028 and 23.05.030.d

23.05.025 - Grading Permit Required:

A grading permit shall be obtained before beginning any: grading, excavation, or fill activities; or for any diking or dredging activities involving wetlands and riparian areas; or for any earthwork, paving, surfacing or other construction activity that alters any natural or other existing offsite drainage pattern, including but not limited to any change in the direction, velocity or volume of flow; except for the activities identified by Section 23.05.026 (Grading Permit Exemptions). This section and Section 23.05.026 supersede Section 7003 of the Uniform Building Code. Where a grading permit application proposes a project that is not otherwise subject to the land use permit requirements of Chapters 23.03 or 23.08 or other applicable section of this title, grading permit approval certifies that the proposed project will satisfy all applicable provisions of this title and thereby constitutes approval of a coastal development permit. Where a grading permit is appealable to the Coastal Commission pursuant to Section 23.01.043, Minor Use Permit approval is also required as set forth in Section 23.02.033.

23.05.026
Replaced with 23.05.032.b

23.05.026 - Grading Permit Exemptions.

The following activities are exempt from the requirements of Section 23.05.025 for a grading permit:

a. Where authorized by a valid building permit, excavations below existing or finish grade for basements, and footings of a building, retaining walls or other structures; provided that this shall not exempt any fill made with material from such excavation nor exempt any excavation occurring where the natural slope of the site exceeds 20 percent or any excavation having an unsupported height greater than five feet after the completion of such structure.

b. Cemetery graves.

c. Excavations or fills approved by the county Engineering Department for subdivision map projects with approved coastal development permits.

This exemption for agricultural cultivation is proposed to be replaced with 23.05.032.b.(10), 23.05.032.b.(11), 23.05.032.c, and 23.05.034.

d. Agricultural cultivation activities including preparation of land for cultivation, other than grading for roadwork or pads for structures.

e. Surface mining operations approved in accordance with Section 23.08.180 et seq. (Surface Mining).

f. An excavation which is less than two feet in depth; or which does not create a cut slope greater than five feet in height and steeper than one and one-half horizontal to one vertical.

g. A fill less than one foot in depth and placed on natural terrain with a slope flatter than five horizontal to one vertical, or less than three feet in depth, not intended to support structures, which does not exceed 50 cubic yards on any one lot and does not obstruct a drainage course.

h. Excavations for wells, tunnels (except mining - see Section 23.08.190 et seq.), routing pipeline maintenance practices disturbing areas less than 1,000 square feet in size; or installation, testing, placement in service, or the replacement of any necessary utility connection between an existing facility and an individual customer or approved development for utilities regulated by the Public Utilities Commission, including electrical, water, sewage disposal or natural gas lines, on a single site or within a public right-of-way; provided that this exemption does not apply to such excavations in the following areas: [Amended 1992, Ord. 2591]

(1) Any area designated as appealable pursuant to Section 23.01.043;

(2) Within an archaeologically sensitive area as shown in the Land Use Element;

(3) Within 100 feet of an Environmentally Sensitive Habitat;

(4) Extensions of water or sewage service outside of an urban services line as shown in the Land Use Element.

23.05.027
Replaced by 23.05.058

23.05.027 - Grading Permit Fees.

Fees for grading permits shall be as set forth in County Fee Ordinance. This section supersedes Section 7007(b) of the Uniform Building Code.

23.05.028

23.05.028 - Grading Permit - Application Content:

This portion of the section is replaced by Section 23.05.030.d, which provides that a Minor Use Permit is required if a grading permit is appealable.

To apply for a grading permit, a Plot Plan application is to be submitted, together with the additional information required by this section. (Where a grading permit is appealable to the Coastal Commission pursuant to Section 23.01.043, the application shall also include all information required by Section 23.02.033 for a Minor Use Permit.) Where grading requiring a permit is proposed in conjunction with a Site Plan, Minor Use Permit or Development Plan request, those applications may be used to satisfy grading permit information requirements as long as all required information is submitted. This section supersedes Section 7006 of the Uniform Building Code.

Subsection a
Replaced by 23.05.038.b

a. Minor grading: Where Section 23.05.025 requires a grading permit and the grading will move less than 5,000 cubic yards; is located on slopes less than 30%; and is not located within a Geologic Study Area or Flood Hazard combining designation, the application for a grading permit is to include the following, where required by the Building Official:

(1) Contour information:

(i) For sites with slopes of 10% or less, generalized existing contours and drainage channels, including areas of the subject site (and adjoining properties) that will be affected by the disturbance either directly or through drainage alterations.

(ii) For sites with slopes greater than 10% and less than 30%, details of area drainage and accurate contours of existing ground at two-foot intervals; for slopes 30% or greater, contours at five-foot intervals.

(2) Location of any buildings or structures existing or proposed on the site within 50 feet of the area that may be affected by the proposed grading operations, including any wetlands, coastal stream or riparian vegetation.

(3) Proposed use of the site necessitating grading, where a land use permit has not been issued.

(4) Limiting dimensions, elevations or finished contours to be achieved by the grading, and proposed drainage channels and related construction.

(5) Drainage plan (Section 23.05.044 (Drainage Plan Content)).

(6) Compaction report, where a site is proposed to be filled to be used for a building pad.

(7) A soil engineering report, including data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and criteria for corrective measures when necessary, and opinions and recommendations covering adequacy of sites to be developed by the proposed grading.

(8) An engineering geology report, including a description of site geology, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading.

(9) Intended means of revegetation, including the location, species, container size and quantity of plant materials proposed, and the proposed time of planting.

(10) Protective measures to be taken during construction, such as hydro-mulching, berms (temporary or permanent), interceptor ditches, subsurface drains, terraces, and/or sediment traps in order to prevent erosion of the cut faces of excavations or of the sloping surfaces of fills. (Such information shall be submitted in the form of a sedimentation and erosion control plan pursuant to Section 23.05.036, when required by that section.)

Subsection b
Replaced by 23.05.038.c

b. Engineered grading: Where Section 23.05.026 requires a grading permit, and the grading will move 5,000 cubic yards or more, is located on slopes of 30% or greater, or is located within a Geologic Study Area, Flood Hazard area or within 100 feet of any Environmentally Sensitive Habitat, the grading plan is to be prepared and certified by a registered civil engineer, and is to include specifications covering construction and material requirements in addition to the information required for minor grading.

23.05.030

23.05.030 - Grading Permit Review and Approval:

Grading permit applications shall be processed as follows:

Subsection a
Replaced by 23.05.036.d.(1)

a. Environmental determination: As required by Title 14 of the California Administrative Code, all grading permit applications are to be transmitted to the Environmental Coordinator for an environmental determination pursuant to the California Environmental Quality Act (CEQA), except for the applications that propose grading on terrain with slopes less than 10%, that will involve less than 5,000 cubic yards of earth moving and are not located within a Sensitive Resource Area combining designation, 23.05.030 which applications are hereby deemed categorically exempt from the provisions of CEQA. Following transmittal to the Environmental Coordinator, no action shall be taken to approve, conditionally approve or deny a grading permit until it is:

(1) Returned to the Planning and Building Department accompanied by a written determination by the Environmental Coordinator that the project is exempt from the provisions of CEQA; or

(2) Returned to the Planning and Building Department accompanied by a duly issued and effective negative declaration; or

(3) Returned to the Planning and Building Department accompanied by an environmental impact report certified by the Board of Supervisors.

Subsection b
Replaced by 23.05.036.d.(2)

b. Application processing where EIR required: Where the Board of Supervisors has required an environmental impact report pursuant to CEQA, and:

(1) If a development plan is not required by other provisions of this title, a grading permit application shall be processed, reviewed and approved according to all the provisions of Section 23.02.034 (Development Plan), and the criteria of subsection e. of this section; or

(2) If a development plan is required by other provisions of this title, a grading permit shall be processed, reviewed, and approved according to the provisions of this section, including a requirement that the grading permit application shall be consistent with and satisfy all applicable conditions of approval of the development plan.

Subsection c
Replaced by 23.05.036.d.(3)

c. Application processing where no EIR is required: Where a grading permit is categorically exempt from the provisions of CEQA or has been granted a negative declaration, the Building Official may approve the permit where the proposed grading is in conformity with applicable provisions of this title; provided:

(1) The Building Official may require that grading operations and project designs be modified if delays occur that result in weather-generated problems not considered at the time the permit was issued.

(2) Where a negative declaration for a grading permit has identified mitigation measures necessary to reduce environmental impacts, such mitigation measures are to be applicable to the approved grading permit and grading operations as conditions of approval.

Subsection d
Replaced by 23.05.030.d

d. Application processing for appealable development: Where grading activities are appealable to the Coastal Commission pursuant to Section 23.01.043, the grading permit shall be processed as a Minor Use Permit (Section 23.02.033).

Subsection e
Replaced by 23.05.036.e.(1)

e. Criteria for approval: A grading permit may be issued only where the Building Official first finds, where applicable, that:

(1) The extent and nature of proposed grading is appropriate to the use proposed, and will not create site disturbance to an extent greater than that required for the use;

(2) Proposed grading will not result in erosion, stream sedimentation, or other adverse off-site effects or hazards to life or property;

(3) The proposed grading will not create substantial adverse long-term visual effects visible from off-site.

(4) Proposed drainage measures have been approved by the County Engineer.

Subsection f
Replaced by 23.05.036.f.(2)

f. Grading permit time limits:

(1) An approved grading permit is valid for a period of 120 days from the effective date of the permit, after which the permit shall expire unless:

(i) Grading has begun.

(ii) An extension has been granted as set forth in subsection f of this section.

(2) Where grading has been commenced within 120 days of permit issuance, grading operations are to be completed within 120 days from the date of commencement of grading unless an extension has been granted (subsection f), or the initial approval specifies a longer term for completion.

Subsection g
Replaced by 23.05.036.f.(2)

g. Extension of grading permit: Any permittee holding an unexpired grading permit may apply for an extension of the time within which grading operations are to be begun or completed, pursuant to Section 19.04.034 of the Building and Construction Ordinance, Title 19 of this code.

23.05.032

23.05.032 - Commencement and Completion of Grading:

All grading operations for which a permit is required are subject to inspection by the Building Official, and are to be completed in accordance with the following provisions:

Subsection a
Replaced by 23.05.052

a. Inspection: Where required by the Building Official, grading operations are to be conducted only while under the inspection of the Building Official, as set forth in Section 7014 of the Uniform Building Code, provided the Building Official may waive this requirement where inspection is conducted by another public agency or where the Building Official determines the nature and extent of proposed grading does not need continuous inspection.

Subsection b
Replaced by 23.05.048.a.(2).(c).(6) and 23.05.052

b. Independent testing: The Building Official may require inspection and testing by an approved testing agency, and is responsible for coordination of the parties to all grading activities, including the civil engineer, soils engineer, and engineering geologist (where required), the grading contractor and the testing agency.

Subsection c
Replaced by 23.05.036.e.(3)

c. Bonding: Guarantees of performance may be required by the Building Official as set forth in Section 7008 of the Uniform Building Code and Section 23.02.060 of this title.

Subsection d
Replaced by 23.05.036.f.(4)

d. Completion of work: Completion of grading operations is to occur in accordance with Section 7015 of the Uniform Building Code.

23.05.034
Replaced by 23.05.048

23.05.034 - Grading Standards:

All excavations and fills, whether or not subject to the permit requirements of this title, shall be conducted in accordance with the provisions of Sections 7009 through 7013 of the Uniform Building Code, and the following standards:

a. Area of cuts and fills: Cuts and fills shall be limited to the minimum amount necessary to provide stable embankments for required parking areas or street rights-of-way, structural foundations, and adequate residential yard area or outdoor storage or sales area incidental to a non-residential use.

b. Grading for siting of new development. Grading for the purpose of creating a site for a structure or other development shall be limited to slopes less than 20% except:

(1) Existing lots in the Residential Single-Family category, if a residence cannot feasibly be sited on a slope less than 20%; and

(2) When grading of an access road or driveway is necessary to provide access to building site with less than 20% slope, and where there is no less environmentally damaging alternative; and

(3) Grading adjustment. Grading on slopes between 20% and 30% may occur by Minor Use Permit or Development Plan approval subject to the following:

(i) The applicable review body has considered the specific characteristics of the site and surrounding area including: the proximity of nearby streams or wetlands, erosion potential, slope stability, amount of grading necessary, neighborhood drainage characteristics, and measures proposed by the applicant to reduce potential erosion and sedimentation.

(ii) Grading and erosion control plans have been prepared by a registered civil engineer and accompany the request to allow the grading adjustment.

(iii) It has been demonstrated that the proposed grading is sensitive to the natural landform of the site and surrounding area.

(iv) It has been found that there is no other feasible method of establishing an allowable use on the site without grading on slopes between 20% and 30%.

c. Grading adjacent to Environmentally Sensitive Habitats. Grading shall not occur within 100 feet of any Environmentally Sensitive Habitat except:

(1) Where a setback adjustment has been granted as set forth in Sections 23.07.172d(2) (Wetlands) or 23.07.174d(2) (Streams and Riparian Vegetation) of this title; or

(2) Within an urban service line when grading is necessary to locate a principally permitted use and where the approval body can find that the application of the 100-foot setback would render the site physically unsuitable for a principally permitted use. In such cases, the 100-foot setback shall only be reduced to a point where the principally-permitted use, as modified as much as practical from a design standpoint, can be located on the site. In no case shall grading occur closer than 50 feet from the Environmentally Sensitive Habitat or as allowed by planning area standard, whichever is greater.

d. Landform alterations within public view corridors. Grading, vegetation removal and other landform alterations shall be minimized on sites located within areas determined by the Planning Director to be a public view corridors from collector or arterial roads. Where feasible, contours of finished grading are to blend with adjacent natural terrain to achieve a consistent grade and appearance.

e. Final contours: Contours, elevations and shapes of finished surfaces are to be blended with adjacent natural terrain to achieve a consistent grade and natural appearance. Border of cut slopes and fills are to be rounded off to a minimum radius of five feet to blend with the natural terrain.

f. Grading near watercourses: Grading, dredging or diking (consistent with Section 23.07.174) shall not alter any intermittent or perennial stream, or natural body of water shown on any USGS 7-1/2 minute map, except as permitted through approval of a county drainage plan and a streambed alteration permit from the California Department of Fish and Game issued under Sections 1601 or 1602 of the Fish and Game Code. (Additional standards are contained in Sections 23.07.172 through 174 of this title.) Watercourses shall be protected as follows:

(1) Watercourses shall not be obstructed unless an alternate drainage facility is approved.

(2) Fills placed within watercourses shall have suitable protection against erosion during flooding.

(3) Grading equipment shall not cross or disturb channels containing live streams without siltation control measures approved by the County Engineer in place.

(4) Excavated materials shall not be deposited or stored in or alongside a watercourse where the materials can be washed away by high water or storm runoff.

g. Revegetation: Where natural vegetation has been removed through grading in areas not affected by the landscape requirements (Section 23.04.180 et seq. - Landscape, Screening and Fencing), and that are not to be occupied by structures, such

areas are to be replanted as set forth in this subsection to prevent erosion after construction activities are completed. [Amended 1993, Ord. 2649]

(1) Preparation for revegetation: Topsoil removed from the surface in preparation for grading and construction is to be stored on or near the site and protected from erosion while grading operations are underway, provided that such storage may not be located where it would cause suffocation of root systems of trees intended to be preserved. After completion of such grading, topsoil is to be restored to exposed cut and fill embankments or building pads to provide a suitable base for seeding and planting.

(2) Methods of revegetation: Acceptable methods of revegetation include hydro-mulching, or the planting of rye grass, barley or other seed with equivalent germination rates. Where lawn or turf grass is to be established, lawn grass seed or other appropriate landscape cover is to be sown at not less than four pounds to each 1,000 square feet of land area. Other revegetation methods offering equivalent protection may be approved by the Building Official. Plant materials shall be watered at intervals sufficient to assure survival and growth. Native plant materials are encouraged to reduce irrigation demands. Where riparian vegetation has been removed, riparian plant species shall be used for revegetation.

(3) Timing of revegetation measures: Permanent revegetation or landscaping should begin on the construction site as soon as practical and shall begin no later than six months after achieving final grades and utility emplacements.

23.05.036
Replaced by 23.05.042 and 23.05.048.c

23.05.036 - Sedimentation and Erosion Control:

a. Sedimentation and erosion control plan required: Submittal of a sedimentation and erosion control plan for review and approval by the County Engineer is required when:

(1) Grading requiring a permit is proposed to be conducted or left in an unfinished state during the period from October 15 through April 15; or

(2) Land disturbance activities, including the removal of more than one-half acre of native vegetation are conducted in geologically unstable areas, on slopes in excess of 30%, on soils rated as having severe erosion hazard, or within 100 feet of any water course shown on the most current 7-1/2 minute USGS quadrangle map.

(3) The placing or disposal of soil, silt, bark, slash, sawdust or other organic or earthen materials from logging, construction and other soil disturbance activities above or below the anticipated high water line of a watercourse where they may be carried into such waters by rainfall or runoff in quantities deleterious to fish, wildlife or other beneficial uses.

When a sedimentation and erosion control plan is required, none of the activities described in subsections a(1) through a(3) above shall be commenced until such plan is approved by the County Engineer pursuant to this section.

b. Sedimentation and erosion control plan preparation and processing: Sedimentation and erosion control plans shall address both temporary and final measures and shall be submitted to the County Engineer for review and approval. When such plans are required, they shall be prepared by a registered civil engineer or other qualified professional approved by the County Engineer. Such plans shall be prepared in accordance with the San Luis Obispo County Standard Improvement Specifications and

Drawings. Sedimentation and erosion control plans may be incorporated into and approved as part of a grading, drainage or other improvement plan, but must be clearly identified as a sedimentation and erosion control plan. Selection of appropriate control measures shall be based upon evaluation of project design, site conditions, pre-development erosion rates and the environmental sensitivity of adjacent areas.

c. Plan check, inspection, and completion: Where required by the County Engineer, the applicant is to execute a plan check and inspection agreement with the county and the sedimentation and erosion control facilities inspected and approved before a certificate of occupancy is issued.

d. Sedimentation and erosion control measures: The control of sedimentation and erosion shall include but is not limited to the use of the following:

(1) Slope surface stabilization:

(i) Temporary mulching, seeding or other suitable stabilization measures approved by the County Engineer shall be used to protect exposed erodible areas during construction.

(ii) Earth or paved interceptors and diversions shall be installed at the top of cut or fill slopes where there is a potential for erosive surface runoff.

(2) Erosion and sedimentation control devices: In order to prevent polluting sedimentation discharges, erosion and sediment control devices shall be installed as required by the County Engineer for all grading and filling. Control devices and measures that may be required include, but are not limited to energy absorbing structures or devices to reduce the velocity of runoff water.

(3) Final erosion control measures: Within 30 days after completion of grading, all surfaces disturbed by vegetation removal, grading, haul roads, or other construction activity that alters natural vegetative cover, are to be revegetated to control erosion, unless covered with impervious or other improved surfaces authorized by approved plans. Erosion controls may include any combination of mechanical or vegetative measure, including those described in USDA Soil Conservation Service Bulletin 347.

e. Off-site effects. Grading operations shall be conducted to prevent damaging effects of erosion, sediment production and dust on the site and on adjoining properties.

23.05.038
Replaced by 23.05.056.b

23.05.038 - Appeal:

Any determination as to conformance with the grading standards in this chapter may be appealed to the Board of Supervisors in accordance with the procedure set forth in Section 23.01.042a of this title.

23.05.039
Replaced by 23.05.056.c.(1)

23.05.039 - Nuisance and Hazard Abatement:

Existing grading that has become hazardous to life or property is subject to Section 3304 through 3318 of the Uniform Building Code. Any grading performed in violation of this section shall be deemed a nuisance, and full abatement and restoration may be required and an assessment of cost may be levied in accordance with Chapter 23.10 (Enforcement).

23.05.040
Replaced with new language (within 23.05.040) and in 23.05.048.b.

23.05.040 - Drainage:

Standards for the control of drainage and drainage facilities provide for designing projects to minimize harmful effects of storm water runoff and resulting inundation and erosion on proposed projects, and to protect neighboring and downstream properties from drainage problems resulting from new development. The standards of Sections 23.05.042 through 23.05.050 are applicable to projects and activities required to have land use permit approval.

23.05.042
Replaced by 23.05.040.a

23.05.042 - Drainage Plan Required:

No land use or construction permit (as applicable) shall be issued for a project where a drainage plan is required, unless a drainage plan is first approved pursuant to Section 23.05.046. Drainage plans shall be submitted with or be made part any land use, building or grading permit application for a project that:

a. Involves a land disturbance (grading, or removal of vegetation down to duff or bare soil, by any method) of more than 40,000 square feet; or

b. Will result in an impervious surface of more than 20,000 square feet; or

c. Is subject to local ponding due to soil conditions and lack of identified drainage channels; or

d. Is located in an area identified by the County Engineer as having a history of flooding or erosion that may be further aggravated by or have a harmful effect on the project; or

e. Is located within a Flood Hazard (FH) combining designation; or

f. Involves land disturbance or placement of structures within 50 feet of any watercourse shown on the most current USGS 7-1/2 minute quadrangle map; or

g. Involves hillside development on slopes steeper than 10 percent.

h. May, by altering existing drainage, cause an on-site erosion or inundation hazard, or change the off-site drainage pattern, including but not limited to any change in the direction, velocity, or volume of flow.

i. Involves development on a site adjacent to any coastal bluff.

23.05.043
Replaced by 23.05.036.d.(1)

23.05.043 - Environmental Determination Required.

In any case where a drainage plan is required by Section 23.05.042 and an environmental determination is not otherwise required by Section 23.02.033 (Minor Use Permit), Section 23.02.034 (Development Plan), Chapter 23.07 (Combining Designations), or Section 23.05.030 (Grading Permit Review and Approval), the project application is to be subject to an environmental determination as set forth in Section 23.02.034b(1) before a decision to approve the application, except for single-family residences which are exempt from the provisions of CEQA.

23.05.044
Replaced by 23.05.040.d

23.05.044 - Drainage Plan Preparation and Content:

Drainage plans shall be neatly and accurately drawn, at an appropriate scale that will enable ready identification and recognition of submitted information. The County Engineer may require drainage plans to be prepared by a registered civil engineer.

a. Basic drainage plan contents: Except where an engineered drainage plan is required, a drainage plan is to include the following information about the site:

(1) Flow lines of surface waters onto and off the site.

(2) Existing and finished contours at two-foot intervals or other topographic information approved by the County Engineer.

(3) Building pad, finished floor and street elevations, existing and proposed.

(4) Existing and proposed drainage channels including drainage swales, ditches and berms.

(5) Location and design of any proposed facilities for storage or for conveyance of runoff into indicated drainage channels, including sumps, basins, channels, culverts, ponds, storm drains, and drop inlets.

(6) Estimates of existing and increased runoff resulting from the proposed improvements.

(7) Proposed erosion and sedimentation control measures.

(8) Proposed flood-proofing measures where determined to be necessary by the County Engineer.

b. Engineered plan content: Engineered drainage plans are to include an evaluation of the effects of projected runoff on adjacent properties and existing drainage facilities and systems in addition to the information required by subsection a of this section.

23.05.046
Replaced by 23.05.036.e.(1).(b)

23.05.046 - Drainage Plan Review and Approval:

All drainage plans are to be submitted to the County Engineer for review, and are subject to the approval of the County Engineer, prior to issuance of a land use or construction permit, as applicable. Actions of the County Engineer on drainage plans may be

appealed to the Board of Supervisors in accordance with the procedure set forth in Section 21.01.042a of this title; except that where the site is within a Flood Hazard combining designation, the procedure described in Section 23.07.066d shall be used.

23.05.048
Replaced by 23.05.036.e.(1).(b)

23.05.048 - Plan Check, Inspection and Completion:

Where required by the County Engineer, a plan check and inspection agreement is to be entered into and the drainage facilities inspected and approved before a certificate of occupancy is issued.

23.05.050
Replaced by 23.05.048.b

23.05.050 - Drainage Standards:

a. Design and construction. Drainage systems and facilities subject to drainage plan review and approval that are to be located in existing or future public rights-of-way are to be designed and constructed as set forth in the County Engineering Department Standard Improvement Specifications and Drawings. Other systems and facilities subject to drainage plan review and approval are to be designed in accordance with good engineering practices. The design of drainage facilities in new land divisions and other new development subject to Minor Use Permit or Development Plan approval shall maximize groundwater recharge through on-site or communitywide stormwater infiltration measures. Examples of such measures include constructed wetlands, vegetated swales or filter strips, small percolation ponds, subsurface infiltration basins, infiltration wells, and recharge basins. Where possible, recharge basins shall be designed to be available for recreational use.

b. Natural channels and runoff. Proposed projects are to include design provisions to retain off-site natural drainage patterns and, when required, limit peak runoff to pre-development levels. To the maximum extent feasible, all drainage courses shall be retained in or enhanced to appear in a natural condition, without channelization for flood control. On downhill sites, encourage drainage easements on lower properties so that drainage can be released on the street or other appropriate land area below.

c. Areas subject to flooding. Buildings or structures are not permitted in an area determined by the County Engineer to be subject to flood hazard by reason of inundation, overflow, high velocity or erosion, except where such buildings or structures are in conformity with the standards in Section 22.07.066 of this title and provisions are made to eliminate identified hazards to the satisfaction of the County Engineer. Such provisions may include providing adequate drainage facilities, protective walls, suitable fill, raising the floor level of the building or by other means. The placement of the building and other structures (including walls and fences) on the building site shall be such that water or mudflow will not be a hazard to the building or adjacent property. The County Engineer in the application of this standard shall enforce as a minimum the current federal flood plain management regulations as defined in the National Flood Insurance Program, authorized by U.S. Code Sections 4001-4128 and contained in Title 44 of the Code of Federal Regulations Part 59 et seq., which are hereby adopted and incorporated into this title by reference as though they were fully set forth here.

d. Development adjacent to coastal bluffs. Stormwater outfalls that discharge to the bluff, beach, intertidal area, or marine environment are prohibited unless it has been demonstrated that it is not feasible to detain the stormwater on-site, or direct the stormwater to pervious land areas or the street, without causing flooding or erosion. In such instances, stormwater outfalls shall include filtration and treatment systems necessary to protect coastal water quality, be screened from public view using underground pipes and/or native vegetation screening of local stock, and receive all applicable agency approvals.

Consolidation of existing outfalls shall be pursued where feasible. The drainage plan shall incorporate all reasonable measures to minimize increased erosion to the coastal bluff as a result of development.

e. Water Runoff.

(1) Best Management Practices - Residential development. All new residential development subject to discretionary review shall use Best Management Practices (BMPs) to address polluted runoff. BMPs shall be consistent with the guidance found in documents such as the California Storm Water Best Management Practices Handbook (Municipal). Such measures shall include, but not be limited to: minimizing the use of impervious surfaces (e.g., installing pervious driveways and walkways); directing runoff from roofs and drives to vegetative strips before it leaves the site; and/or managing runoff on the site (e.g., percolation basins); and other Low Impact Design (LID) techniques. The installation of vegetated roadside drainage swales shall be encouraged and, if used, calculated into BMP requirements. The combined set of BMPs shall be designed to treat and infiltrate storm water runoff up to and including the 85th percentile storm event. The Best Management Practices shall include measures to minimize post-development loadings of total suspended solids.

(2) Best Management Practices - Non-Residential development. All new non-residential development subject to discretionary review shall use Best Management Practices (BMPs) to control and prevent pollutants from entering the storm drain system. BMPs shall be consistent with the guidance found in documents such as the California Storm Water Best Management Practices Handbook (Industrial/Commercial). Such measures shall include both source control and treatment control practices to ensure that contaminants do not leave the site. Stormwater runoff from commercial development shall be filtered through BMPs that treat storm water runoff up to and including the 85th percentile storm event. Restaurant and other commercial cleaning practices that can impact water quality (such as floor mat rinsing and vehicle cleaning) by introducing chemicals to storm drain systems (detergents, oils and grease and corrosive chemicals) shall provide designated areas that collect and dispose of this runoff through the sanitary septic system. Street sweeping and cleaning shall use best management practices outlined in the above referenced handbook or the Model Urban Runoff Program to keep contaminants and cleaning products from entering the storm drain system. The Best Management Practices shall include measures to minimize post-development loadings of total suspended solids. Where feasible, other Low Impact Design (LID) techniques shall be implemented.

Addressed in 23.04.450

f. Parking lots and paved areas. Parking lots and other paved areas where automobiles are parked that are 1.0 acres or greater in size shall be equipped with facilities and/or measures to address post-construction runoff and ongoing non-point source pollution (e.g., sediment and grease traps, oil/water separators, biofilters), and shall be subject to a periodic maintenance program which is funded and carried out by the property owner.

g. Sensitive habitat and groundwater protection. Runoff from roads and development shall not adversely affect sensitive habitat, groundwater resources and downstream areas, and shall be treated to remove floatable trash, heavy metals and chemical pollutants as necessary prior to discharge into surface or groundwater.

h. Impervious surfaces. New development shall be designed to minimize the amount of impervious surfaces in order to maximize the amount of on-site runoff infiltration.